

## METHODS AND APPARATUS FOR OPERATING GAS TURBINE ENGINE COMBUSTORS

### ABSTRACT OF THE DISCLOSURE

A method facilitates assembling a gas turbine engine. The method comprises coupling a combustor including a dome assembly and a combustor liner that extends downstream from the dome assembly to a combustor casing that is positioned radially outwardly from the combustor, coupling a fuel injector including a fuel inlet and an air inlet to the combustor casing such that the fuel injector extends axially through the dome assembly such that fuel may be discharged from the primer nozzle into the combustor, and coupling the air inlet to an air source such that cooling air received therethrough is circulated through the fuel injector to facilitate cooling the fuel injector.